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WM.

12/14/04

1 – 14 (cancelled)

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15. (Currently Amended) A method for preparing a non-thermal plasma reactor comprising:

forming cell building blocks of material having a high dielectric constant, said cell building blocks having interior cell walls forming an exhaust passage for flowing gas to be treated therethrough and exterior cell walls;

printing a conductive print onto an exterior surface of at least one of said exterior cell walls; ~~cells, walls of said cells forming an exhaust passage for flowing gas to be treated therethrough~~

assembling said ~~cells~~ cell building blocks into a multi-cell stack;

preparing electrical connections for connecting said ~~cells~~ cell building blocks to a high voltage source;

applying insulation to said multi-cell stack; and

inserting said multi-cell stack into a non-thermal plasma reactor housing.

16. (Original) The method of claim 15, wherein said forming is by extruding.

17. (Original) The method of claim 15, wherein said building blocks comprise full cells.

18. (Original) The method of claim 15, wherein said building blocks comprise half cells, assembled in pairs wherein each pair forms a full cell.

19. (Original) The method of claim 18, wherein said forming comprises roll compaction fabrication.

20. (Original) The method of claim 18, further comprising:
disposing a catalytic coating on at least one of said half-cells.
21. (Cancelled)
22. (Original) The method of claim 15, further comprising:
connecting said cells comprising said multi-cell stack by diffusing glass
glue at selected print locations into dielectric material comprising said cells.
23. (Original) The method of claim 15, further comprising:
connecting said cells comprising said multi-cell stack with collars.
24. (Original) The method of claim 15, further comprising:
connecting said cells comprising said multi-cell stack with adhesive
applied to sides of said multi-cell stack.
25. (Cancelled)
26. (New) The method of claim 15, further comprising:
providing a first insulating plate to a first end of the multi-cell stack and
providing a second insulating plate to a second, opposite end of the multi-cell stack.